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## ABSTRACT

Practitioners and researchers argue about how reading should be taught, about what students should read, and about how best to organize reading instruction in the classroom. Diverse methods are used to teach reading. These range from isolated skills-based (intensive phonics/basal reading programs) to integrated, whole language approaches that stress language experience, reading, writing, and critical thinking. Since a sobering percentage of American children have difficulty in learning to read, an inquiry was made into how best to reverse this trend in a high school remedial reading classroom. The study's purpose was to compare the teaching of an integrated, whole language approach to remedial reading using the novel to a traditional, skills-based approach. The area of interest was reading comprehension. Subjects were 54 students enrolled in high school remedial reading classes at North Marion High School in north central West Virginia. The measuring device was the Metropolitan Achievement Test. Data were obtained from a control group and an experimental group. Analysis of the data indicated that an experimental group of high school remedial reading students who received whole language instruction using the novel and a control group that received traditional, skills-based instruction scored equally on a standardized reading comprehension test. Since no significant difference was shown in the two methods of reading instruction, the conclusion is that individualization and a balance between whole language and skills-based instruction is most beneficial to high school remedial reading students. (Contains 6 tables of data and 65 references.) (CR)

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**SKILLS-BASED OR WHOLE LANGUAGE READING INSTRUCTION?**  
**A COMPARATIVE STUDY IN**  
**THE IMPROVEMENT OF THE READING COMPREHENSION**  
**OF HIGH SCHOOL STUDENTS**

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**A Thesis**

**Presented to**

**The Faculty of the Master of Arts Degree Program**

**Salem-Teikyo University**

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**In Partial Fulfillment**

**of the Requirements for the Degree**

**Master of Arts in Education**

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**By**

**Margaret S. Wilson**

**August 1998**

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SKILLS-BASED OR WHOLE LANGUAGE  
READING INSTRUCTION?  
A COMPARATIVE STUDY IN  
THE IMPROVEMENT OF THE READING COMPREHENSION  
OF HIGH SCHOOL REMEDIAL READING STUDENTS

ABSTRACT

Practitioners and researchers argue about how reading should be taught, about what students should read, and about how best to organize reading instruction in the classroom. Diverse methods are used to teach reading. These range from isolated skills-based (intensive phonics/basal reading programs) to integrated, whole language approaches that stress language experience, reading, writing, and critical thinking. Since a sobering percentage of American children have difficulty learning to read, this inquiry was made into how best to reverse this trend in a high school remedial reading classroom.

The purpose of this study was to compare the teaching of an integrated, whole language approach to remedial reading using the novel to a traditional, skills-based approach. The area of interest was reading comprehension. The study involved 54 students enrolled in high school remedial reading classes at North Marion High School in north central West Virginia. The measuring device in the study was the Metropolitan Achievement Test.

The data in this study were obtained from a control group and an experimental group. The analysis of the data indicated that an experimental group of high school remedial reading students who received whole language instruction

using the novel and a control group that received traditional, skills-based instruction scored equally on a standardized reading comprehension test. Since no significant difference was shown in the two methods of reading instruction in this study, the conclusion is that individualization and a balance between whole language and skills-based instruction is most beneficial to high school remedial reading students.

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## Chapter 1

### THE PROBLEM AND ITS SETTING

#### Introduction

The main goal of education is to teach people to read. Reading is one of the principal ways of transmitting a culture from one generation to another; failure to learn to read can keep people from full participation in society (Wolf, 1993).

Reading is a complex skill. Although the exact details are not known, the process begins when the reader looks at printed material, perceives the organization of the letters, connects the visual perception and auditory sensation, selects meaning given in the context, and finally comprehends the passage. In order for these skills to take place reflexively when a child reaches maturity, the school builds these skills in the child through study and practice. The main task of reading instruction is to provide opportunities for working on these skills (Wolf, 1993).

Practitioners and researchers argue about how reading should be taught, about what students should read, and about how best to organize reading instruction in the classroom (Fay, 1956). Diverse methods are used to teach reading. These range from isolated skills-based (intensive phonics/basal reading programs) to integrated, whole language approaches that stress language experience, reading, writing, and critical thinking. Since a sobering percentage of

American children have difficulty learning to read, this inquiry was made into how best to reverse this trend in a high school remedial reading classroom (Kolstad & Bardwell, 1997).

### Purpose of Study

The purpose of this study was to compare two groups of students in a high school remedial reading classroom. One group was instructed using the traditional skills-based method and the other using an integrated whole language approach. Standardized tests were administered prior to and immediately following the study to determine if significant differences existed in the reading comprehension of the two groups.

### Research Question

The study was guided by the research question: Do high school remedial reading students who receive whole language instruction using the novel score higher on standardized reading comprehension tests than students instructed with a traditional skills-based method?

### Hypothesis

$H_0$ : Students in a high school remedial reading classroom who receive whole language instruction using the novel and students who receive traditional

skills-based method of instruction will score equally on a standardized reading comprehension test.

$H_1$ : Students in a high school remedial reading classroom who receive whole language instruction using the novel will score higher on a standardized reading comprehension test than students who receive traditional skills-based method of instruction.

### Definition of Terms

Balanced approach - Using the balanced approach to teach reading, teachers blend basic skills instruction with exposure to rich literature and writing (Manzo, 1997). Phonics is taught in systemic fashion, within the context of real stories (DiegmueLLer, 1996).

Basal reading program - The basal reading program is a complete package of teaching materials, including student reader, teacher's manual, student workbook, practice sheets, word cards, filmstrips, audio cassette tapes, and tests (Demos, 1987).

Behaviorism - Behaviorism is a theory or doctrine that studies human behavior through analysis of objectively observable behavioral events, in contrast with subjective mental states (Flexner, 1987).

Cognitive psychology - Cognitive psychology is a branch studying the mental processes involved in perception, learning, memory, and reasoning (Flexner,

1987).

Functionally illiterate - A person who is functionally illiterate has some basic education but still falls short of a minimum standard of literacy or whose reading and writing skills are inadequate for everyday needs (Flexner, 1987).

Intrinsic phonics - Intrinsic phonics is phonics that is taught more gradually, in the context of meaningful reading (Chall, 1983).

Phoneme - In linguistics study, a phoneme is the smallest unit of speech that distinguishes one word element from another in the English language (Esher, 1997).

Phonics - Phonics is instruction in the relationship between letters and speech sounds. The purpose of phonics is to teach students the alphabetic principle, enabling them to see the relationship between letters and sounds and letters and meanings, thus assisting them in the identification of known words and to independently figure out unfamiliar words (Anderson, Hiebert, Scott, & Wilkinson, 1985).

Phonological awareness - Phonological awareness is defined as the ability to hear and manipulate sound units in the language, such as syllables, the major parts of syllables, and phonemes (Adams & Bruck, 1995).

Prior knowledge - Prior knowledge has to do with information gained in other times and other places, knowledge that students potentially can bring with them to their reading (Gilles, Bixby, Crowley, Crenshaw, Henrichs, Reynolds, & Pyle,

1988).

**Reading** - Reading is the process of constructing meaning from written text.

Reading is so complex that it requires the coordination of a number of interrelated skills (Anderson, et al., 1985).

**Reading comprehension** - The researcher's definition of reading comprehension is "the process of constructing meaning through the dynamic interaction among the reader's existing knowledge, the information suggested by the written language, and the context of the reading situation" (Wixson & Peters, 1984, p. 4).

**Semantics** - Semantics is the study of meaningful and linguistic development by examining changes in meaning and form (Flexner, 1987).

**Skills-based instruction** - The traditional theory of learning to read is that children learn a complex skill like reading by first making sense of the smallest components of the language (letters) and then progressing to larger components (sounds, words, and sentences). Children learn to read by decoding the language (Diegmueller, 1996).

**Whole language** - Reading instruction that can be called "whole language" teaches children to create meaning from a transaction/interaction of information and the reader's existing knowledge. Whole language involves an interchange among reader, text, environment, and the reading process (Gutknecht, 1989). Whole language means that all of language (reading, writing, listening, and speaking) in an integrated form must be presented to students if they are to learn to read and

write (Gilles, et al., 1988).

### Assumptions

1. The sample in this study was adequate in size.
2. The sample in this study was typical of high school remedial reading students.
3. The students in the whole language group and the direct skills instruction group were of equal intelligence.
4. The teaching methods used with the two groups were significantly different.
5. The time frame of this study was adequate.
6. All of the students in this study were present during the duration of this study.
7. The Metropolitan Achievement Test used in this study is valid.
8. The Metropolitan Achievement Test provides valid and adequate information in the evaluation of students' reading comprehension.

### Limitations

1. This study was geographically limited to a rural high school community in north central West Virginia.
2. The students in this study were largely from middle and lower socio-economic families. The majority of the students were Caucasian.
3. The students in the classes involved in this study were all below their grade level in reading comprehension.

4. The students in this study were in grades nine through twelve and were recommended for remedial reading instruction. They were randomly placed in these classes by a computer scheduling process.
5. Some of the students in this study received language instruction from other language arts instructors. This additional instruction may have influenced results.
6. One teacher instructed both the whole language group and the traditional instruction group.
7. The Metropolitan Achievement Test was the sole testing device used for comparison in this study.
8. Reading comprehension was the only component of reading instruction that was measured by this study.

#### Importance of the Study

The traditional method of reading instruction began with reading lessons that focused on phonics, emphasized a tightly controlled vocabulary, and continued with short "basal" (basic) reading passages, followed by "skill-and drill" exercises, each with only one correct answer (Diegmueller, 1996).

The introduction of whole language into the reading classroom represented a different philosophy about the teaching and learning of language in the classroom. Whole language became an innovation that stressed that children use language in ways that relate to their own lives and cultures and that involve all the

communication skills - reading, writing, listening, speaking (Diegmueller, 1996).

Much research has been done on these two powerful schools of thought. Many school systems insist that the curriculum reflect a time-honored reliance upon phonics and basal readers. Conversely, the whole language approach is embraced by many educators. For a time the whole language approach was so dominant, that when reading test scores remained stagnant, or even declined, a powerful pro-phonics backlash occurred. Many experts now favor a balance between the two approaches, blending the best of both whole language and traditional reading instruction (Diegmueller, 1996).

Since research is limited as to the preferred method of remediating high school readers, this study is a comparison between the traditional, direct, skills-based method of teaching reading and whole language instruction, using high interest/low level novels. If it is determined that one method brings better results in the reading comprehension of high school remedial reading students, a recommendation to retain and expand that method would be warranted.

## Chapter 2

### REVIEW OF THE LITERATURE

#### Introduction

The purpose of this study was to compare the teaching of an integrated approach to remedial reading using the novel to a more traditional, skills-based approach to remedial reading. The review of the literature includes the following topics: the ability to read, skills-based instruction, whole language, and a balanced approach to reading comprehension.

#### The Ability to Read

In earlier days, the vast majority of people could neither read nor write. They received information by word of mouth. Stories about their families or their leaders were passed down from generation to generation of listeners. Only the most important records were kept in writing, and anyone who could read and write was a member of a special ruling class. Today, the ability to read is necessary for nearly everyone. Adults who cannot read or who are functionally illiterate find it difficult to get a job, find housing, buy food, or receive medical care. Reading is no longer a special skill; it is a basic requirement (Chall, Popp, & Hirshberg, 1993).

Primitive man made pictures, using pointed flintflake on stone, bone, horn,

and every other conceivable material, to communicate ideas, and there is evidence that the pictures were quite similar throughout the world. Later, the symbols came to represent ideas, rather than just single words. In the course of time man has developed many types of written languages and found that language consists of sounds that are represented by written characters. The ability to understand these characters became increasingly important. By the beginning of the 19th century, the ability to read was so highly valued that increasing numbers of children attended school (Wolf, 1993).

Thus, reading instruction became the major job of the school. School success or failure can often be traced to the child's success or failure at learning to read. It is estimated that 75 percent of what a student learns in high school is learned through reading (Fay, 1956). All school subjects depend heavily on reading. When a school improves its reading program, improvement can be seen in the various subjects being taught in that school. Many high school students become dropouts because they are unable to read on a level in keeping with the demands of the subjects in which they are enrolled (Aaron, 1961).

Reading is a basic life skill and becomes the basis for a child's success in school. Without the ability to read well, opportunities for personal fulfillment and job success will inevitably be lost. Society and individuals place much importance on reading. In the classrooms across the country, reading is an essential tool for success. Not being able to read textbooks, do research in the library, or even read

the teacher's notes on the blackboard directly affects the quality and quantity of a child's learning (Anderson, Hiebert, Scott, & Wilkinson, 1985).

Adult readers and even high school teachers often forget how difficult it might have been for some children to learn to read and take for granted the many times reading ability is used. Reading touches all aspects of life and, to a large extent, influences one's lifestyle, often being the determining factor in one's employment opportunities. Thus, literacy issues have become the concern, not only of schools, but of society and legislators alike. Adult literacy and remediation classes aid people in becoming more self-sufficient, thus easing both human and political issues such as unemployment and welfare costs. Psychologists know that reading can help relieve depression and boredom (Leu & Kinzer, 1987).

Reading is a complex process, involving an intermingling of at least the following elements: people (readers and writers), language, and printed matter. In simplest terms reading is defined as "getting information from the printed page" or "communication between an author and a reader" (Smith & Johnson, 1980, p.201). A few decades ago, Leonard Bloomfield (1942), a noted American linguist, referred to reading as the greatest intellectual feat of anyone's lifetime.

Reading is important for society as well as for the individual. While a country receives a good return on its investment in education at all levels, nursery school through college, research shows that the returns are highest from the early

years of schooling when children are first learning to read (Psacharopoulos, 1981). The Commission on Excellence (1983) warned of the risk for America from shortcomings in secondary education. The early years set the stage for later learning. Without the ability to read well, excellence in high school and beyond is unattainable (Chall, 1983).

As knowledge of the reading process has evolved, so have the definitions of reading become more complex. Although "getting meaning from print" is one way to define reading, such simplified definitions do not adequately identify the complexity of the process, nor do they reflect the interaction of factors which enter into the reading process. Rudolf Flesch (1981) relates reading to a set of mechanical skills. In his view, "Learning to read is like learning to drive a car...the child learns the mechanics of reading; and, when he is through, he can read" (p.3). Dechant (1982) feels that reading is more complex. He states that reading cannot occur unless the pupil can identify and recognize the printed symbol, and be able to give it a name. Meaning is absolutely essential in reading. Dechant speculates that too much emphasis in reading instruction has been placed on word identification and not enough on comprehension. Rumelhart (1986) sees even more intricacies in the reading process. He states that:

Reading is the process of understanding written language. It begins with a flutter of patterns on the retina and ends when successful with a definite idea about the author's intended message,...a skilled reader must be able to make use of sensory, syntactic, semantic, and pragmatic information to accomplish his task. These various sources of information interact in many

complex ways during the process of reading (p.722).

Another definition by Leu and Kinzer (1987) states that "Reading is a developmental, interactive, and global process involving learned skills. The process specifically incorporates an individual's linguistic knowledge and can be both positively and negatively influenced by nonlinguistic internal and external variables or factors" (p.9).

Definitions of reading are personal, based on one's view of how one reads or on the method by which one has been taught to read. Any definition of reading is only a guide and must change as the knowledge of the reading process grows. Reading is a complex skill requiring the coordination of a number of interrelated sources of information. Becoming a skilled reader is a matter of continuous practice, development, and refinement. Learning to read ought to be a delightful, successful experience for children. Some students, however, find learning to read a drudgery, a difficult and frustrating task (Anderson, et al., 1985).

Reading serves many purposes. It is a means of gathering information, it can provide relaxation and entertainment, as well as being a means to pleasure through the learning of new ideas. Reading can be silent or, on occasion, oral (Stauffer, 1980). Being able to read does not make a person smart or productive, but being able to read makes it possible for a person to function more intelligently and effectively within modern society. This is the perspective which teachers of reading most need to develop (Baird, 1987). The final goal for teaching reading

must be to produce readers, not readers just on grade level, but lovers of reading and devourers of reading (Carbone, 1987).

One of the most agreed upon conclusions of modern research about reading deals with the complexity of the reading process. Anderson et al. (1985) describes this complexity as follows:

Based on what we now know, it is incorrect to suppose that there is a simple or single step which, if taken correctly, will immediately allow a child to read. Becoming a skilled reader is a journey that involves many steps. Similarly, it is unrealistic to anticipate that some one critical feature of instruction will be discovered which, if in place, will assure rapid progress in reading. Quality instruction involves many elements. Strengthening any one element yields small gains. For large gains, many elements must be in place (p.4).

Further, the Commission on Reading states in its report, Becoming a Nation of Readers, "while there is more consensus about reading than in the past, there are still important issues about which reasonable people disagree" (Anderson, et al., 1985, p.4). Practitioners and researchers still argue about how reading should be taught, about what students should read, and about how best to organize reading instruction in classrooms. Specialists in the reading field make fervent claims for their approaches to a particular aspect of reading, whether it be intensive phonics, basal reader approach, reading/writing connection, whole language, or high-level thinking skills as "the answer" for teachers of reading. The lack of a body of agreed-upon knowledge in the field of reading means not only that the arguments will last a long time, but that various kinds of exaggerated claims will continue to

be made. This lack of a foundation of knowledge has much to do with the swings and fads for which the reading field is known (Winograd & Greenlee, 1986).

Recent revision of theories and instructional methods have been made because of the tremendous amount of research that has been done in the area of reading in the 1970's, 1980's, and 1990's. Researchers speculate that changes in theories and the competitive nature of reading instruction may produce seemingly able readers who only engage in reading for external rewards, such as grades, and who never develop a love of reading. Children who are placed in reading groups that are compared to each other come to view reading as a competitive activity. School systems that allow reading goals to be determined by test scores, textbook companies, outside educators, and the public come to view reading as a competition (Van Prooyen & Clouse, 1994). Researchers also argue that teachers have become "deskilled" in the sense that they no longer exercise their professional judgment in deciding what to teach, how to teach, and when it should be taught (Shannon, 1983, 1984; Shulman, 1983; Woodward, 1986). Shannon (1983) believes that teachers exercise instructional control only to the extent that their textbooks will allow. Some of the blame can be put on the use of commercial reading materials (i.e. basal readers and workbooks), while other blame can be placed upon the politics of school systems, classroom management issues, and accountability. Teachers differ widely in their reading instruction goals (Calfée & Drum, 1979). Calfée and Drum (1979) speculate that when a teacher is ineffective

in helping students achieve reading goals, that perhaps changing that teacher's goals would be an essential step in changing practices. They suggest more intense teacher preservice and inservice in order to provide more coherent reading instruction. Some teachers may be spending too much time guiding children through materials by assigning them activities and worksheets and too little time engaged in the kind of teaching that will help children appreciate what they are reading and develop into independent readers (Winograd & Greenlee, 1986).

Freedom for teachers to make curriculum judgments is essential to the development of a quality reading program. Classroom teachers know more about their individual students than do the authors and publishers of reading programs. It is critical that teachers use their knowledge in selecting and adapting materials and lessons that suit the needs, strengths, and interests of their students. Teachers must be enthusiastic in order to create quality reading programs. They must share their love of reading with children (Van Prooyen & Clouse, 1994).

If, indeed, teachers are expected to teach children to read and to help them improve, refine, and apply their reading abilities, then the teacher and the school district must decide on a sensible approach to the teaching of reading. If, indeed, one of the major objectives of the school is to help each student become an independent reader, then the classroom organization used must help students learn and gain proficiency in applying reading skills to the reading of all types of material (Van Prooyen & Clouse, 1994).

### Skills-Based Instruction

The traditional theory of learning to read, which became part of the instructional process with the beginning of mass schooling in the 19th century, is that children learn a complex skill like reading by first making sense of the smallest components of the language (letters) and then progressing to larger components (sounds, words, and sentences). When reading instruction occurs through skills-based or direct instruction, children learn to read by learning to decode the language, and understanding follows after they break the code and master the components. Traditional American education begins, therefore, with reading lessons that focus on phonics (sounding out first letters, then combinations of letters), tightly controlled vocabulary, and short "basal" (or basic) reading passages, followed by numerous skills exercises, each with only one correct answer (Diegmueller, 1996).

Traditional reading instruction involves the teaching of specific, isolated, and often abstract skills. Teachers check off one skill after another until all are taught and learned, and then, at least from a basic skills perspective, the child is a competent reader. Reading instructional materials and programs are developed based upon detailed, highly sequential, step-by-step manuals of directions for teachers (Gutknecht, 1989).

In linguistics study, the smallest unit of speech that distinguishes one word element from another in the English language is called a phoneme. Every

language consists of a specific group of phonemes. English is made up of 45 distinct sounds, 25 of which are consonant sounds and 19 which are vowel sounds. As with all alphabetic languages, the emphasis of teaching reading using phonics has been on correlating the written print to the phonetic sounds used in the spoken language. For years, this method of teaching reading and writing did not vary much. Children are taught, going from the simple to the complex: first, the alphabet, then simple short syllables and then words. Once their decoding skills have developed to a reasonable level, children are introduced to short "basal" reading passages, stories, and poems. Children are expected to use their phonetic decoding skills whenever they encounter a new word. Practice is the most important component in making the decoding process automatic and almost unconscious (Esher, 1997).

Through the 1980's and early 1990's, some prominent reading researchers have argued for the intense and systematic teaching of phonics (Chall, 1983; Adams, 1990; Stahl, 1992). According to Constance Weaver (1994), educators agree that children learning to read written English texts must learn that there is a relationship between letter patterns and sound patterns in English; they also agree that children need to develop the ability to relate letter patterns to sound patterns. Recently, though, those staunch advocates of phonics argue that phonics is all that children need in order to learn to read. The sources of phonics-first propaganda back their arguments with references to respected researchers, who commonly

proclaim to demonstrate the superiority of teaching phonics intensively and systematically. However, even these researchers do not advocate the phonics-only method as a means of teaching children to read (Adams, 1990).

The major body of comparative research arguing for the teaching of intense phonics was originally that summarized by Jeanne Chall in 1967 and updated in 1983. Chall summarizes her findings by saying that judging from the studies comparing systematic phonics with intrinsic phonics (phonics taught more gradually, in the context of meaningful reading) it can be concluded that systematic phonics at the very beginning tends to produce generally better reading and spelling achievement than intrinsic phonics, at least through grade three (Chall, 1983). In this context, "achievement" means scores on standardized tests, that, for reading, often contain subtests of phonics knowledge. This body of research says nothing about how children read and comprehend normal texts (Carbo, 1988).

The last decade has seen considerable research on phonological awareness. Phonological awareness is defined as the ability to hear and manipulate sound units in the language, such as syllables, the major parts of syllables, and phonemes. Some of this research has demonstrated that there is a strong correlation between phonemic awareness and reading achievement, as measured by scores on standardized tests (Adams & Bruck, 1995; Beck & Juel, 1995; Foorman, 1995). Such correlation research has led to the argument that children

should be explicitly taught phonemic awareness, not merely to help them sound out words, but to recognize words on sight, automatically (Stanovich, 1991, 1992).

Although phonic methods were more prevalent before World War I, the first sight, whole-word, or "look and say" methods began in the 19th century. Believing that words are recognized as wholes and that a word's meaning is more important than its pronunciation, William Holmes' "McGuffey Reader" was developed and used until the first quarter of the 20th century. This basal reader approach to teaching reading first began to develop with the introduction of McGuffey readers in the 1830's. McGuffey readers became the mainstay in American education. For almost a century they were the main reading materials for over 80 percent of America's school children (Hart, 1950). One of the lasting contributions of the McGuffey was its careful graduation of material in a series that provided one reader for each grade of the elementary school (Gage, 1963).

From 1930 to 1960, McGuffey readers became regarded as out-of-date, and newer readers began to replace them. In the 1960's and 1970's, a new style in the basal reading series emerged. Each dimension of the reading series, from story setting to characters to themes to subject matter, underwent dramatic change (Steddon & Stever, 1979).

The basal reader of today represents a publisher's attempt to develop a preplanned, sequentially organized group of materials and methods for teaching developmental reading. Basal readers have traditionally followed the pattern of

McGuffey readers, which featured controlled vocabulary, gradually increasing difficulty, and content aimed at being interesting to the majority of children (Peryon, 1981).

Today the basal reader approach is the favored approach for teaching reading in the majority of elementary classrooms (Chall, 1983). George and Evelyn Spache (1977) reported that, in a survey of 1300 teachers, 95 to 98 percent used the basal reader approach to teach reading. The chief appeals of the basal reader are that it is sequential and teachers with limited backgrounds in the teaching of reading can use it easily and successfully for beginning instruction (Baird, 1987). Shannon (1983) suggests that teachers feel administrative pressure to use the basal reader and its accompanying teacher's manual as a major component of their reading program. Parents and the community also place pressure on teachers and the school to provide formal textbooks for their children to learn to read.

The basal reader approach involves utilization of a carefully organized series of books. Most series try to address all phases of the reading program, including word recognition, vocabulary development, comprehension, oral and silent reading, and reading for information and recreation. The teachers' manuals give an assortment of suggestions and detailed plans for each story and include a sequence of skills practices (Dowhover, 1989). The components of basal programs are: student reader, teacher's manual, student workbook, practice sheets,

word cards, filmstrips, audio cassette tapes, and tests. The strengths include high structure, many approaches, scope, sequence, non-realistic stories, and the abundance of pre-prepared worksheets and skills-practices (Demos, 1987).

Stories found in basal readers have changed over the years as society's image of itself has changed. Content has passed through religious, moral, materialistic, and, more recently, multicultural phases. Basal reader publishers are using more good literature and even hiring famous children's authors to write original stories for early reading texts. They realize that sexism, ageism, work mode bias, racism, and stereotypic ideal family situations have no place in children's reading material. If readers are to understand text, basals must be understandable; they must be realistic (Cassidy, 1987).

### Whole Language

After World War II, the heavy emphasis on skills-based reading instruction began to give way to a broadened concept of language learning (Kolstad & Bardwell, 1997). Recognizing the limitations of basic skills instruction and the quality of reading materials that focused on a skills acquisition model of the reading process, school systems across the nation implemented a shift in both instruction and materials to what is known as a "literature-based, whole language approach" (Gutknecht, 1989).

The term "whole language" was coined by Dr. Kenneth Goodman of the

University of Arizona in the early 1980's. Whole language developed into much more than just a reading program. It is an educational philosophy in its own right. Goodman believed that learning written language occurs naturally, in the same way spoken language is acquired. He thought children learn to read primarily by figuring out the meaning of words from analyzing the context in which they occur (Esher, 1997). Although several states and school districts had practiced whole language, at least in part, the educational philosophy and pedagogy first gained widespread acceptance in California, where the state education department incorporated it into its English-language arts framework in 1987 (Diegmuller, 1996). In Canada, other leaders emerged during approximately this same time period, among them Judith Newman and David Doake. In New Zealand and Australia, where whole language is known as "natural" learning, the best-known researchers are Don Holdaway and Brian Cambourne (Weaver, 1995). Whole language has been described by Goodman, Bird, and Goodman (1991) as:

nothing short of a grass-roots revolution in education. It brings together the scientific study of learning, of language, of teaching, and of curriculum with the positive, people-centered, historical traditions that sensitive, caring teachers have always upheld. A whole language classroom is a democratic community of learners, and its curriculum is embedded in the culture and social experience of the larger community (p.1).

Whole language has received a great deal of attention from the professional community as an alternative to the traditional basal reading program (Kolstad & Bardwell, 1997).

In part, the shift from skills-based reading instruction to whole language was based on investigations into the reading process that indicated that readers create meaning from a transaction/interaction of information and the reader's existing knowledge. From this perspective, reading is an interchange among the reader, the text, the environment, and the reading process. This "receptive language" aspect requires the reader to decode the message of the text, encoded by the author. The reader decodes by bringing his/her experiential and conceptual background of thoughts and ideas to the search for meaning in the text (Gutknecht, 1989).

Reading instruction that can be called "whole language" must be built on the understanding of the nature and relationship of author, text, reader, and language. Basic skills reading approaches pay less attention to author and reader, focusing almost entirely on the text and the phonemic codes of the language. A typical description of enthusiasm for whole language comes from Routman (1988), who says that reading should be taught as an active process, that students should be actively involved with print. The elements of whole language should be used so that students acquire an appreciation and love for reading.

In defending the trend toward whole language, researchers from the Center for the Study of Reading reported that although current basal stories use real children's literature, many stories seem unbelievable next to the children's own lives and certainly dull in comparison to television. Basal stories focus on what

characters say and do and not on what they are thinking and feeling, thereby depriving children of the opportunity to develop critical thinking strategies (Marshall, 1983). Whole language attempts to present students with text that is understandable, with characters and situations within the realm of reality (Gutknecht, 1989).

Whole language declares that reading should not be taught as a fragmented series of subskills, because real language does not exist in isolated bits and pieces. Reading should be presented to the student as an integrated unit composed of listening, speaking, and writing, as well as actual reading experience (which should include use of the language experience approach, the directed reading approach, and the teacher reading to the students) (Gutknecht, 1989). Whole language is pragmatic in its approach, in that it is language in use, having to do with the reader's prior knowledge and with how language has meaning within the context in which it is read. Whole language involves semantics, that is the writer's/reader's sense of meaning, that is influenced by background and culture (Gilles, Bixby, Crowley, Crenshaw, Henrichs, Reynolds, & Pyle, 1988).

Tierney and Pearson (1985) suggested several ways to help teachers overcome the constraints of the typical reading lesson and the "skill and drill" approach. Teachers must find out the children's prior knowledge before reading the story, encourage rereading, and give students the opportunity go evaluate their own ideas. In addition, students must be given the opportunity to consider the

viewpoints of others and to recognize the influence their own past experiences and their own reasons for reading have on their understanding of the text. Further, teachers should spend time helping students develop strategies for reading, perhaps "mapping" the reading task prior to actual reading, encourage students to consider the author's message to them, develop links between what students read and what they write, and involve students in discussion and cooperative learning, regarding their reading assignments.

According to Constance Weaver (1995), some of the key characteristics of whole language education are the following:

1. Acceptance of learners. All learners are accepted, regardless of their cultural or socio-economic background or other characteristics or labels. But "acceptance of learners" also means that whole language teachers develop classroom environment and curriculum with the students, engaging them in learning about things that interest them.
2. Flexibility within structure. Instead of having children do one worksheet after another, whole language teachers organize the day into larger blocks of time, so that students engage in meaningful pursuits. They study a theme or topic across several curriculum areas. Students have many choices as to what they will do and learn; however, the teacher guides, supports, and structures the students' learning as needed.
3. Supportive classroom community. Teachers have the opportunity to

help children interact with each other, solving interpersonal conflicts and problems, supporting one another in learning, and taking much responsibility for their own behavior and learning.

4. Expectations for success as they engage in "real" reading, writing, and learning. Students are given the support they need to read and write whole texts from the very beginning. Whole language teachers have discovered that almost all students can learn to read and write whole texts.

5. Skills taught in context. Instead of being taught in isolation, skills are taught in mini-lessons and conferences, within the context of students' reading, writing, and learning. Phonics is taught mainly through writing the sounds they hear in the words read and reread with the teacher. Spelling and grammar are mainly taught while children are revising and editing their writing. In short, skills are taught while students are engaged in real-life tasks.

6. Teacher support for learning and collaboration. Whole language teachers collaborate with children in carrying out research projects and, in the process, they model and explain how to do things that the children cannot yet do alone. By collaborating on projects, children provide similar support for one another.

7. Contextual assessment that emphasizes individuals' growth, as well as their accomplishments. Assessment takes on a new meaning within whole language theory. Standardized tests are not emphasized. Assessment is based

primarily upon what children are doing from day to day as they read, write, research, and express their learning in various ways. Whole language teachers often involve children in assessing their own work and progress and in setting future goals for learning. Parents and peers may also be involved in assessment. Individual growth and strengths are emphasized, within agreed-upon goals and predetermined criteria.

Whole language represents a different philosophy about teaching, learning, and the role of language in the classroom. It stresses that children should use language in ways that relate to their own lives and cultures. In the whole language classroom, the final product, the "answer," is not as important as the process (Diegmueller, 1996). Reading instruction must be implemented in the context of the other language/communication processes--speaking, listening, and writing. The content of materials must be real to the children. Finally, whole language experts say that reading instruction has not been all wrong in the past; it has just been starting in the wrong place. Whole language advocates proclaim that by focusing more on the reader's knowledge and the orderly combination of related parts of the language system, whole language instruction begins in the mind of the reader, not with the letters on the page (Gutknecht, 1989).

#### A Balanced Approach to Reading Comprehension

Research in reading comprehension has received more attention in the past

15 years than in the previous six decades. Roger Glaser suggests in Becoming a Nation of Readers that the research now available on the reading process can help to identify what teaching practices are most effective in the teaching of reading comprehension (Anderson, et al., 1985). Early research in reading comprehension (1915 to 1970) seemed to move at a snail's pace, perhaps reflecting the continuing influence of the behavioral tradition that dominated psychology during that time. Behaviorism emphasized the study of observable behavior or events. Since the reading process is primarily a mental process, much of the process is not observable and, therefore, outside the scope of psychological testing. Research in reading began to assume a "product orientation," with attention given to accuracy in oral reading and performance on standardized tests of reading skills. The results of such testing was a undue emphasis on phonics, since the testing of the knowledge of letter sounds, blending skills, auditory perception and discrimination is fairly simple. The comprehension process was treated as a "by-product," since many assumed that comprehension automatically followed, once students has "broken the code," and could listen to what they themselves said (Anthony, Pearson, & Raphael, 1989).

Fortunately for those concerned with reading comprehension, the field of psychology that had banned reading comprehension as a field of study reinstated the study, this time in the area of cognitive psychology. Reading, considered to be one form of problem solving, began to be studied by psychologists, linguists, and

anthropologists, in addition to reading educators. Several new models of reading instruction evolved during this period (Pearson, 1986). Gough (1972) and his colleagues proposed bottom-up models, emphasizing the flow of information from text, to visual memory, to auditory memory, to comprehension. Smith (1971) and Goodman (1976), on the other hand, developed top-down models that emphasized the internalization of meaning from reading. Other researchers such as Rumelhart (1977) and Stanovich (1980) constructed interactive models which, depending upon the text, context, and reader, allow the flow of information to switch from bottom-up to top-down.

The reading community defines reading comprehension as "the process of constructing meaning through the dynamic interaction among the reader's existing knowledge, the information suggested by the written language, and the context of the reading situation" (Wixson & Peters, 1984, p.4). It is representative of the current trend away from decoding-only emphasis. Reading comprehension involves interpreting text and constructing meaning in light of the reader's background knowledge, his/her goals, purpose, and expectations (Anthony, et al., 1989).

With the knowledge that a demonstration of competence in a collection of reading skills does not equal reading, teachers understand that instructional emphasis in reading must move from phonics-only, skill-and-drill, easy-to-teach, easy-to-test reading instruction to application of knowledge. This means that

reading instruction moves from surface level word recognition skills and low level literal comprehension skills to the interpretive and applied levels of comprehension which enable the reader to meet the real goal of reading--understanding the message of the author (Gutknecht, 1989).

The comprehension of what one reads is communication process, involving the processes of speaking, listening, and writing. The purpose of this communication is to send and receive a message from the speaker (the writer) to the listener (the reader). Any reading instruction that stops short of this purpose, is changed, because it is short-changing the reader. Teachers begin comprehension instruction early, and it is built on what children already know. All children, regardless of background, have some kind of prior knowledge. Using a top-down or transactive/interactive approach, teachers should use meaningful, predictable stories and ask literal and interpretive level questions, involving children in comprehension strategies such as stating main idea, grouping and classifying information, sequencing, and predicting outcomes (Gutknecht, 1989).

Learning to read is a critical basic skill, yet its accomplishment among American children is by no means automatic or universal (Kolstad & Bardwell, 1997). The most striking finding from the 1994 National Assessment of Educational Progress (NAEP) was that the average reading proficiency of twelfth-grade students declined significantly from 1992 to 1994.

No consensus exists on just how reading is learned. Most students seem to

master phonics and other basal reader skills perfectly in the lower grades. But a common occurrence in high school classrooms is to have students who can "decode" a reading passage flawlessly, have perfect pronunciation, but do not comprehend what they read. Because this situation is so very common--with students who master their phonics perfectly, but cannot adequately comprehend what they so easily pronounce--educators look to engage students in what they are learning so that reading becomes more meaningful (Cirone, 1997).

As previously stated, the term "whole language" is often used to cover a process designed to immerse students in literature and related writing activities. Whole language is effective with most children, but some respond better to other methods. Teachers cannot be limited to only one method of teaching reading (Kolstad & Bardwell, 1997). As Church (1994) stated, "I have faced the uncomfortable reality that there really are no certainties in teaching - no right way. Some students learn best from part to whole, others learn better using the holistic method (whole to part)" (p.362).

Using whole language to the exclusion of phonics and basic reading skills was never the intention of those who developed the theory of whole language. It used literature that was of interest to young people in order to engage them in the process more rapidly, and to enrich reading programs that frequently offered unending "drill-and-kill" skills that were far removed from the purpose of getting meaning from what was read. But it never meant to replace phonics, and those

few who used it to extreme were as misguided as those who would not supplement the basal readers with literature. Conversely, reading and understanding great literature are also of little use if one cannot express oneself with good pronunciation and clear spelling. Students must be taught both phonics and comprehension skills (Cirone, 1997). Spiegel (1992) stated that bridges can and must be built between whole language and more traditional literacy instruction to enable teachers to blend the best of both in order to help every child reach his or her full literacy potential. She says that teachers will draw what works from a variety of approaches.

In California, where whole language first gained widespread acceptance into language arts instruction, the state board of education has been forced to rethink its approach to reading instruction. Placing much of the blame for dismal standardized test scores on the almost exclusive teaching of whole language, the state board last year rejected all materials that it felt lacked sufficient emphasis on basic reading skills. Yvonne W. Larson, the chairperson of the board, said in an interview, "What we are looking for is a balanced approach...We want voracious readers, but our feeling is they've got to have the basic skills first." California education leaders pledged that they would work toward promoting a balanced approach by having teachers blend basic skills instruction with exposure to rich literature and writing (Manzo, 1997).

Astute teachers who favor a balanced approach to whole language are

aware that, given the same text, readers do not necessarily construct the same meaning. This individuality is recognized, respected, and utilized in the literacy program. With this understanding, teachers are careful not to label readers as low, average, high. They realize that all students are more proficient when reading something of interest than when they are involved in artificial reading material that reaps no benefits or joy. Students realize this fact, also. The teacher's task then becomes, not to stamp out readers' miscues, but rather to help students to establish and control their reading strategies. When readers gain control of the process, their miscues, their comprehension, and their critical thinking get better (Gilles, et al., 1988).

### Conclusion

While it is interesting to debate the pros and cons of various approaches to the teaching of reading, it is meaningless and counterproductive to do so. Any system that eliminates literature and comprehension skills altogether is as useless as one that eliminates phonics and basic skills. Educators should make this clear whenever possible to the public. Different students have different reading needs; educators must have the flexibility to diagnose needs in a given case, then provide the necessary teaching tools (Cirone, 1997).

Society places a high priority on literacy. Reading instruction in both elementary and secondary schools has undergone many changes throughout the

years. Many of these changes have resulted in gains in reading achievement. Despite these gains, schools are constantly searching for innovative approaches and programs that will reach all students. This is necessary since some students are still functionally illiterate at the time of high school graduation. The goal of all school systems and teachers is for the improvement of reading in all children. Since there is no single method that seems appropriate for all children, the recommendation of most current research is that a combination of these approaches be used in the teaching of reading. Balance and individualization have always been (and still are) the keys to teaching children to read (VanProoyen & Clouse, 1994).

## Chapter 3

### METHOD

#### Subjects

North Marion High School, from which the sample was taken, is located in rural, north-central West Virginia, with a largely middle and lower socio-economic population. The high school consists of 1056 students and 64 classroom teachers.

The sample consisted of five intact high school remedial reading classes called English/Reading, taught by one teacher with 18 years experience, eight of which have been in the area of remedial reading. Students in grades nine through twelve, whose reading comprehension test scores are considerably below their grade level, are identified and randomly assigned to the English/Reading classes through computer scheduling.

Because of this random class selection and in order not to disrupt institutional routine, the 27 students in three of the five English/Reading classes were chosen to be the control group, and the 27 students in the other two classes were chosen to be the experimental group. The control group of 18 boys and 9 girls received traditional, skills-based reading instruction, using workbooks and work packets. The experimental group of 20 boys and 7 girls received whole language instruction, using the novel.

## Design

The research design used was quasi-experimental because of the use of randomly assigned groups of subjects, rather than randomly assigned individual subjects. Since the quasi-experimental design was used, a pretest was given before the study began, to determine the homogeneity of the intact control group and the intact experimental group with respect to reading comprehension (the dependent variable). Similarly, at the completion of the experiment, a reading comprehension post-test was administered to assess the similarities/differences between the two intact groups, each having been exposed to different independent variables (methods of teaching).

The Reading Comprehension Test portion of Advanced 1 Form L of the Metropolitan Achievement Test was administered as a pretest to analyze and compare the control group and the experimental group. An independent t-test was run at the .05 level to determine if the two groups were homogeneous in the area of reading comprehension.

The post-test data collected from the results of the Reading Comprehension Test of Advanced 1 Form M (Mat6) was employed to determine how significant a difference in test scores occurred in the two groups at the end of the study. An independent t-test was run at the .05 level on the results to determine if significant differences occurred.

### Experimental Design

| Assignment   | N  | Pretest     | Treatment      | Post-Test   |
|--------------|----|-------------|----------------|-------------|
| Control      | 27 | MAT6 Form L | Skills-based   | MAT6 Form M |
| Experimental | 27 | MAT6 Form L | Whole Language | MAT6 Form M |

Two separate dependent t-tests, run at the .05 level, were also used to analyze the pretest and post-test data from both the control group and the experimental group to determine if the students' reading comprehension was significantly better at the end of the study.

### Procedure

At the beginning of the 1997-1998 school year, the 54 students comprising the control group and the experimental group had been randomly placed in five English/Reading classrooms by computer scheduling. The ten-week experiment began the first part of February, 1998, and was completed mid-April, 1998.

The Reading Comprehension Test of the Metropolitan Achievement Test, Advanced 1 Form L, was administered to all 54 students prior to the inception of the experiment. Twenty-seven students were included in the control group which received traditional, skills-based instruction in remedial reading comprehension. The other 27 students were included in the experimental group which received remedial reading instruction using high-interest, low-level novels. The daily

instruction in the skills-based, control group included the use of various sets of workbooks and work packets that teach reading comprehension as a series of isolated skills: Specific Skills Series (Following Directions, Using the Context, Locating the Answer, Getting the Facts, Getting the Main Idea, Drawing Conclusions, Detecting Sequence, Identifying Inferences), Reading for Concepts, New Practice Readers, and Reading and Critical Thinking in the Content Areas. During the ten-week period, the instructor rotated the skills workbooks, focusing the students on one comprehension skill at a time and providing multiple practices in each skill.

During the same period, the experimental group received instruction in the guided reading of three novels. The first novel, The Outsiders, was read orally and by the entire group. Activities that accompanied the chapter readings were vocabulary in context, questions for discussion and written responses in finding facts and critical evaluation, story mapping, character analysis, prediction, analysis of the elements of the novel, comparing/contrasting the novel with the video, and a cloze procedure final test. Two additional Tale Spinner novels were chosen by each individual student as independent study projects. Students were asked to mimic several of the activities from The Outsiders unit, summarizing chapters, developing their own vocabulary list, finding main idea, predicting and sequencing events, making inferences, and drawing conclusions.

The Reading Comprehension Test of Advanced 1 Form M (MAT6) was

given as a post-test to both groups of students in order to determine if any significant difference in reading comprehension occurred in the two groups at the end of the ten-week study.

### Instrumentation

The Reading Comprehension Test portion of the Metropolitan Achievement Test, Sixth Edition, (MAT6) was the instrument used in this research. The test contains 60 items that measure students' comprehension of reading passages. The reading levels of the 10 passages begin at grade 5 and increase in difficulty to grade 11+. Though the reading selections in Form L and Form M are different, both forms are of equal length and difficulty. The 60 item multiple-choice test assesses students' ability to recognize detail and sequence; infer meaning, cause and effect, main idea, and character analysis; and draw conclusions, determine author's purpose, and distinguish fact from opinion.

Objective criteria for the Advanced 1 Level of the MAT6 are in the form of a raw score, percentile rank, stanine, grade equivalent, and scaled score. (Form M of the MAT6 follows Form L.) For the purpose of this study, students' raw scores were used.

## Chapter 4

### ANALYSIS OF DATA

This chapter presents the results of the study. The data collected that is appropriate to the research question and the implications of that data are discussed.

#### Statement of the Problem

The purpose of this research was to analyze and compare two methods of teaching reading comprehension in a remedial reading classroom. One approach implemented a traditional, skills-based approach to remedial reading. The alternative approach was an integrated, whole-language approach to remedial reading using the novel. Two groups of high school remedial reading students were used in the study. The Metropolitan Achievement Test was the instrument used to evaluate the reading comprehension of the two groups, both before and after the period of the study, to determine if any significant difference existed in student performance.

#### Subjects

The control group in the study consisted of 27 students enrolled in English/Reading classes at North Marion High School who received traditional, skills-based reading instruction. Sample data for the control group is located in

Appendix A. The experimental group included 27 students in English/Reading at the same location who received whole language instruction. Sample data for the experimental group is located in Appendix B.

The gender make-up of the samples is found in Table 1. The control sample consisted of 18 males and 9 females, while 20 males and 7 females made up the experimental sample. This data is graphed in Appendix C.

TABLE 1  
Gender of Students in Samples

| Group        | Number | Males | Females |
|--------------|--------|-------|---------|
| Control      | 27     | 18    | 9       |
| Experimental | 27     | 20    | 7       |

The grade level data of the students in the samples are organized in Table 2. The control group was made up of 7 seniors, 7 juniors, 4 sophomores, and 9 freshmen. The experimental group consisted of 7 seniors, no juniors, 9 sophomores, and 11 freshmen. The graphs in Appendix D show this data.

TABLE 2  
Grade Levels of Students in Samples

| Group        | Number | Seniors | Juniors | Sophomores | Freshmen |
|--------------|--------|---------|---------|------------|----------|
| Control      | 27     | 7       | 7       | 4          | 9        |
| Experimental | 27     | 7       | 0       | 9          | 11       |

The ages of the students in the sample ranged from nineteen to fifteen. Table 3 exhibits the age data. The control group consisted of three 19-year-olds, seven 18-year-olds, four 17-year-olds, three 16-year-olds, and ten 15-year-olds. Zero 19-year-olds, seven 18-year-olds, five 17-year-olds, nine 16-year-olds, and six 15-year-olds made up the experimental group. This data is graphed in Appendix E.

TABLE 3  
Ages of Students in Samples

| Group        | Number | 19 | 18 | 17 | 16 | 15 |
|--------------|--------|----|----|----|----|----|
| Control      | 27     | 3  | 7  | 4  | 3  | 10 |
| Experimental | 27     | 0  | 7  | 5  | 9  | 6  |

### Homogeneity

The Reading Comprehension Test of Advanced 1 Form L of the Metropolitan Achievement Test was administered to both groups of students as a pretest to analyze and compare the reading comprehension level of students in the study. Pretest data is located in Appendix F of this study. Using the raw data given in Appendix F, an independent t-test was run at the .05 level to determine if the two groups were homogeneous in the area of reading comprehension. Based on the results of this t-test, as shown in Table 4, the assumption was made that the groups were similar; therefore, the study continued.

TABLE 4  
Pretest Scores  
Reading Comprehension

| Group        | Number | Mean  | T-score |
|--------------|--------|-------|---------|
| Control      | 27     | 34.85 |         |
| Experimental | 27     | 33.67 |         |
| T-test       |        |       | -0.4339 |

Since the t-score was -0.4439, and the critical t-value was 2.0066, the

sample provided enough evidence to accept the null hypothesis, indicating no significant difference at the .05 level, in the reading comprehension pretest scores of the control group and the experimental group.

Further analysis of the raw data on the pretest from Appendix F indicated that the highest number scored by any individual student in the control group in reading comprehension was 48 of a possible 60. The lowest score was 17, and the average score 34.85. In the experimental group the high score was 51, the low score was 12, and the average score was 33.67.

### The Hypothesis

Students in a high school remedial reading classroom who receive whole language instruction using the novel and students who receive a traditional, skills-based direction will score equally on a standardized reading comprehension test.

### Findings and Interpretations

The ten-week experiment began the first part of February, 1998, and was completed by mid-April, 1998. During this period, the control group received traditional, skills-based reading instruction, while the experimental group was instructed using the whole language method. The Reading Comprehension Test of the Metropolitan Achievement Test, Advanced 1 Form M, was administered as a post-test to both the control group and the experimental group in mid-April, 1998.

The groups consisted of the same students used in the pretest phase of the study. Post-test data is located in Appendix G of this study. Using the raw data given in Appendix G, an independent t-test was run at the .05 level to determine if the null hypothesis would be accepted or rejected in the area of reading comprehension. The results of the t-test are shown in Table 5.

TABLE 5  
Post-test Scores  
Reading Comprehension

| Group        | Number | Mean   | T-score |
|--------------|--------|--------|---------|
| Control      | 27     | 39.481 |         |
| Experimental | 27     | 39.037 |         |
| T-test       |        |        | -0.1601 |

With the t-score of -0.1601 and the critical t-value of 2.0066, the sample provided enough evidence to accept the null hypothesis, indicating no significant difference at the .05 level, in the reading comprehension post-test scores of the control group and the experimental group.

Further analysis of the raw data on the post-test from Appendix G indicated that the highest number scored by an individual student in the control group in

reading comprehension was 57 of a possible 60, while the lowest score was 26, with an average score of 39.481. In the experimental group the high score was also 57, the low score was 12, and the average score was 39.037.

In addition, two separate dependent t-tests, run at the .05 level, were administered to analyze the pretest and post-test data within each group to determine if students' reading comprehension was significantly improved at the end of the study. The results of this test are shown in Table 6.

TABLE 6  
Comparison of Pretest and Post-test Scores  
Reading Comprehension

| Group        | Number | Mean Difference | T-score |
|--------------|--------|-----------------|---------|
| Control      | 27     | -4.630          | -3.6550 |
| Experimental | 27     | -5.370          | -4.6853 |

With a critical t-value of 2.0555 and t-scores of -3.6550 and -4.6853, the sample provided enough evidence to reject the null hypothesis, indicating a significant improvement in reading comprehension scores within both groups from pretest to post-test.

## Chapter 5

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

This study was conducted at North Marion High School during the 1997-1998 school year. The purpose of the research was to analyze and compare reading comprehension test results of two groups of high school remedial reading students. The experimental group of students received reading instruction implementing an integrated, whole-language approach to remedial reading using the novel, while the control group was exposed to a more traditional, skills-based approach to remedial reading. The 27 students in each group were assigned numbers to keep scores confidential. The Metropolitan Achievement Test was the measuring device used to collect pretest and post-test data for purposes of analysis and comparison.

Sample data concerning the gender, age, and grade level of the students in both groups were collected, charted, and graphed. A t-test was run comparing the pretest scores of the control group to those of the experimental group to determine if the two groups were homogeneous. At the .05 level, no significant difference was found. This indicated that the two groups were homogeneous in the area of reading comprehension. Following the 10-week experiment in which each group received different methods of instruction, a t-test was run on the post-test scores of

the two groups to determine if any significant difference could be found in the students reading comprehension. At the .05 level, no significant difference in reading comprehension was found in the two groups, taught by two different methods.

### Conclusions

The pros and cons of various methods of teaching reading have been debated frequently in various education journals. In the past, most school systems advocated the exclusive use of basal readers and the intense use of phonics. After World War II, many school systems adopted a new and innovative approach to reading called whole language.

The results of this study would seem to indicate that the method of instruction had no significant effect on the reading comprehension test scores of students in a high school remedial reading classroom. In this study students taught using whole language and students taught using skills-based instruction scored equally as well on the Metropolitan Achievement Test.

Since no significant difference was shown in the two methods of reading instruction in this study, it would seem logical to conclude that a balanced approach to teaching reading comprehension would be most beneficial to high school remedial reading students.

### Recommendations

For the purpose of future studies in the methods of teaching high school remedial reading, the following recommendations are made:

1. The sample in this study comprised a small group of students from one high school. Future studies could include more students and be conducted in more than one high school.
2. The time period of this study was 10 weeks. A similar study encompassing a longer period of time between pretest and post-test might be done to examine significant differences.
3. Using the same data collected in this study, an analysis could be done comparing the test results of males to females. Test results of students of the same grade level or of the same age could be compared and analyzed.
4. A similar study could be done under the direction and instruction of another or several other teachers and the results compared.
5. A similar study, using less difficult versions of the Metropolitan Achievement Test, could be done at the elementary or middle school level, to ascertain if there is a significant difference in methods of reading instruction at different levels of education.
6. A different testing instrument could be used for evaluation purposes in a similar study.
7. Since the students in this sample are also required to take the Stanford

Achievement Test each year, reading comprehension scores from that test could be compared to results found in this study.

8. Since the Metropolitan Achievement Test provides an item analysis, a study could be conducted, analyzing student weaknesses in comprehension areas such as detail and sequence, inference, cause and effect, main idea, character analysis, drawing conclusions, author's purpose, and fact and opinion.

9. After being exposed to both skills-based reading instruction and whole language, the students involved in the study could be surveyed to determine which method they preferred and which method they found to be most beneficial to them.

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Appendix A  
Control Group Data

| SUBJECT | GENDER | GRADE | AGE |
|---------|--------|-------|-----|
| 1       | M      | 12    | 19  |
| 2       | F      | 9     | 15  |
| 3       | M      | 12    | 18  |
| 4       | F      | 11    | 17  |
| 5       | M      | 9     | 17  |
| 6       | M      | 9     | 15  |
| 7       | M      | 12    | 18  |
| 8       | M      | 12    | 19  |
| 9       | F      | 9     | 15  |
| 10      | M      | 11    | 18  |
| 11      | F      | 9     | 15  |
| 12      | F      | 10    | 16  |
| 13      | M      | 10    | 15  |
| 14      | M      | 12    | 19  |
| 15      | M      | 11    | 17  |
| 16      | M      | 9     | 15  |
| 17      | F      | 9     | 15  |
| 18      | M      | 11    | 18  |
| 19      | M      | 12    | 18  |
| 20      | M      | 10    | 16  |
| 21      | M      | 11    | 16  |
| 22      | F      | 9     | 15  |
| 23      | M      | 10    | 15  |
| 24      | M      | 9     | 15  |
| 25      | F      | 12    | 18  |
| 26      | F      | 11    | 18  |
| 27      | M      | 11    | 17  |

Appendix B

Experimental Group Data

| SUBJECT | GENDER | GRADE | AGE |
|---------|--------|-------|-----|
| 1       | M      | 10    | 16  |
| 2       | M      | 9     | 16  |
| 3       | M      | 12    | 18  |
| 4       | F      | 9     | 16  |
| 5       | M      | 10    | 16  |
| 6       | M      | 9     | 16  |
| 7       | M      | 10    | 17  |
| 8       | M      | 9     | 15  |
| 9       | F      | 12    | 18  |
| 10      | M      | 10    | 17  |
| 11      | F      | 12    | 18  |
| 12      | M      | 12    | 17  |
| 13      | M      | 9     | 15  |
| 14      | M      | 9     | 16  |
| 15      | M      | 10    | 18  |
| 16      | M      | 10    | 17  |
| 17      | M      | 9     | 15  |
| 18      | F      | 9     | 15  |
| 19      | M      | 9     | 16  |
| 20      | F      | 9     | 15  |
| 21      | M      | 9     | 15  |
| 22      | M      | 10    | 16  |
| 23      | F      | 12    | 18  |
| 24      | F      | 12    | 18  |
| 25      | M      | 10    | 16  |
| 26      | M      | 10    | 17  |
| 27      | M      | 12    | 18  |

Appendix C

**Control Group**

Gender



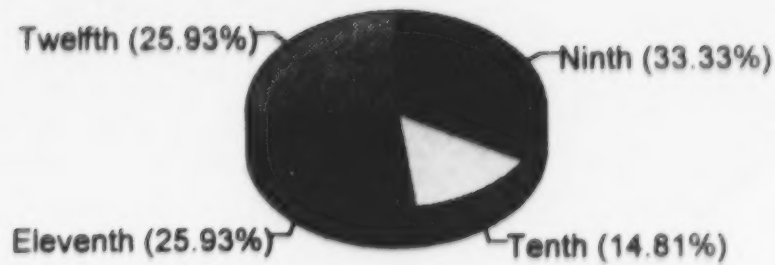
**Experimental Group**

Gender

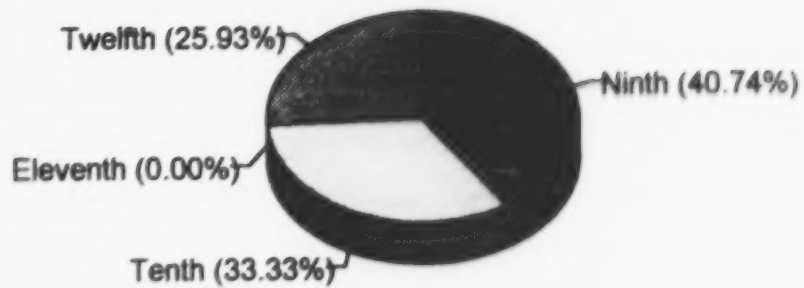


Appendix D

**Control Group**  
Grade



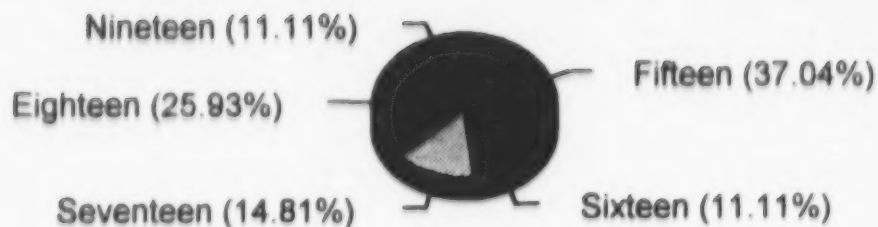
**Experimental Group**  
Grade



Appendix E

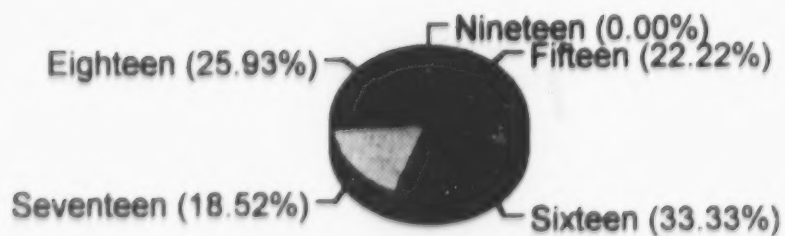
## Control Group

Age



## Experimental Group

Age



Appendix F

Reading Comprehension

Pre-Test Scores\*

| SUBJECT | CONTROL GROUP | EXPERIMENTAL GROUP |
|---------|---------------|--------------------|
| 1       | 36            | 21                 |
| 2       | 38            | 23                 |
| 3       | 27            | 24                 |
| 4       | 17            | 35                 |
| 5       | 24            | 12                 |
| 6       | 24            | 13                 |
| 7       | 43            | 38                 |
| 8       | 40            | 39                 |
| 9       | 30            | 51                 |
| 10      | 33            | 28                 |
| 11      | 47            | 26                 |
| 12      | 27            | 20                 |
| 13      | 47            | 28                 |
| 14      | 33            | 42                 |
| 15      | 46            | 50                 |
| 16      | 34            | 40                 |
| 17      | 25            | 42                 |
| 18      | 31            | 48                 |
| 19      | 36            | 24                 |
| 20      | 32            | 32                 |
| 21      | 39            | 41                 |
| 22      | 32            | 46                 |
| 23      | 41            | 37                 |
| 24      | 32            | 46                 |
| 25      | 46            | 24                 |
| 26      | 33            | 28                 |
| 27      | 48            | 51                 |

\*possible score of 60

Appendix G

Reading Comprehension

Post-Test Scores\*

| SUBJECT | CONTROL GROUP | EXPERIMENTAL GROUP |
|---------|---------------|--------------------|
| 1       | 44            | 31                 |
| 2       | 26            | 32                 |
| 3       | 35            | 30                 |
| 4       | 20            | 42                 |
| 5       | 26            | 21                 |
| 6       | 28            | 12                 |
| 7       | 39            | 44                 |
| 8       | 43            | 37                 |
| 9       | 45            | 57                 |
| 10      | 38            | 42                 |
| 11      | 57            | 48                 |
| 12      | 32            | 20                 |
| 13      | 52            | 40                 |
| 14      | 41            | 51                 |
| 15      | 47            | 51                 |
| 16      | 34            | 47                 |
| 17      | 34            | 47                 |
| 18      | 46            | 44                 |
| 19      | 43            | 27                 |
| 20      | 32            | 35                 |
| 21      | 43            | 44                 |
| 22      | 35            | 55                 |
| 23      | 53            | 41                 |
| 24      | 47            | 39                 |
| 25      | 36            | 26                 |
| 26      | 41            | 38                 |
| 27      | 49            | 53                 |

\* possible score of 60